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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,888	12/26/2001	Steven D. Edelson	36719-173234	9241

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EXAMINER	
LEE, RICHARD J	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,888	EDELSON, STEVEN D.	
	Examiner	Art Unit	
	Richard Lee	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-15 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/12/02.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

(1) claim 1, line 4, "composits" should be changed to "composite" for clarity;

(2) claim 8, line 3, "the scene cuts" shows no clear antecedent basis;

(3) claim 9, line 2, "the pairs of adjacent scene cuts" shows no clear antecedent basis;

(4) claim 9, line 3, "said composits" shows no clear antecedent basis. In addition, "composits" is misspelled;

(5) claim 10, line 10, "composit" should be changed to "composite" for clarity;

(6) claim 10, line 5, "said super-frames" shows no clear antecedent basis; and

(7) claim 14, line 2, "said super-frames" shows no clear antecedent basis.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Burt et al of record (5,999,662).

Burt et al discloses a system for automatically aligning images to form a mosaic image as shown in Figures 1-3, 7-11, and 14, and the same video display system and method as claimed in claims 1 and10, comprising the same video source to provide a video comprising a set of video frames (see column 3, lines 43-67); a video processor to separate the set of video frames into

subsequences and to combine the frames of the input subsequences into super-frames comprising composits of the input subsequences (i.e., as provided by 102 of Figure 7, 1401 of Figure 8 and Figure 14, see column 3, lines 61-67, column 12, lines 22-48, column 15, lines 7-36); a super-frame processor (i.e., 814, 816, 818, 820 of Figure 8) arranged to receive the super-frames and to generate output subsequences of video frames from the super-frames corresponding to the input subsequences of frames from which the corresponding super-frames were composed; a video display device (i.e., 822 of Figure 8, see column 17, lines 10-28) connected to display the output subsequences in sequence as a facsimile of the video; generating a video with a video camera which is subjected to camera motion (see column 4, lines 53-67); and divide the video into input subsequences of frames, and combining the frames of each input subsequence into a super-frame comprising a composit of the frames of such subsequence (i.e., as provided by 102 of Figure 7, 1401 of Figure 8 and Figure 14, see column 3, lines 61-67, column 12, lines 22-48, column 15, lines 6-36).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al as applied to claims 1 and 10 in the above paragraph (3), and further in view of Gove of record (5,973,733).

Burt et al discloses substantially the same video display system and method as above, further including the video processor positioning the frames of the video in the super-frames in

accordance with the detected camera motion and wherein the super-frame processor produces the frames of the output subsequences in accordance with the detected camera motion (see column 4, lines 53-67).

Burt et al does not particularly disclose, though, a video camera motion detection system which detects the motion of a video camera when generating the video, and wherein the video camera motion detection system detects camera shake and/or excessive motion of the camera and generates from the set of video frames a new sequence of video frames in which the effects of camera shake and/or excessive motion are eliminated as claimed in claims 5, 7, 13, and 15. It is noted that though Burt et al teaches the particular manipulation of the displayed image in response to camera motion (see column 4, lines 53-67), Burt et al is silent as to the particular use of a video camera motion detection system which detects the motion of video camera when generating the video as claimed. Since Burt et al teaches the particular manipulation of the displayed image in response to camera motion, it is considered obvious if not inherent that a camera motion detection system is provided within Burt et al for detecting the camera motion for further manipulating the images. In any event, Gove discloses a video stabilization system and method as shown in Figure 2, and teaches the conventional use of camera motion detection system (i.e., 50 of Figure 2, and see Abstract, column 3, lines 49-54, column 4, lines 20-25, column 5, lines 17-25, lines 57-67, column 6, lines 1-15) for detecting motion of a video camera, and modification of the video to compensate for the camera movement. Therefore, it would have been obvious to one of ordinary skill in the art, having the Burt et al and Gove references in front of him/her and the general knowledge of camera motion detections, would have had no difficulty in providing the camera motion detection system of Gove as part of the video display system as

shown in Figure 8 of Burt et al if such detection system was not already provided within Burt et al for the same well known detection of motion of a video camera and for changing the images in response to the detected motion for image stabilization purposes as claimed.

6. Claims 2-4, 8, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al as applied to claims 1 and 10 in the above paragraph (3), and further in view of Astle (5,485,611).

Burt et al discloses substantially the same video display system and method as above, further including a video compression system (i.e., 800 of Figure 8), a video processor connected to receive a video from the video source, the video processor to separate the frames of the received video into sequences, and to combine the frames of each sequence into at least one composite of the frames of such sequence, the composits each comprising the frames of a subsequence (i.e., 102 of Figure 7, 1401 of Figure 8 and Figure 14, see column 3, lines 61-67, column 12, lines 22-48, column 15, lines 7-36).

Burt et al does not particularly disclose, though, the followings:

(a) wherein the video processor detects scene cuts in the video, the input subsequences being selected so as not to include a scene cut between the frames of a given input subsequence, the video processor produces the input subsequences by dividing the scenes between the scene cuts into the input subsequences as claimed in claims 2 and 3;

(b) wherein the super frame processor generates an output sequence from the output subsequences with cross fading from the end of each preceding output subsequence to the beginning of the next succeeding output subsequence, and wherein the output subsequences are

displayed in sequence by fading from the end of each preceding output subsequence into the beginning of the next succeeding output subsequence as claimed in claims 4 and 12;

(c) the video processor being operable to detect the scene cuts in the received video, wherein each sequence does not include a scene cut as claimed in claim 8; and

(d) wherein the video processor divides the scenes between the pairs of adjacent scene cuts into subsequences, the step of dividing the video into input subsequences is carried out by detecting scene cuts in the video and dividing the scenes between the scene cuts into the input subsequences whereby the input subsequences do not include scene cuts as claimed in claims 9 and 11.

Regarding (a) to (d), Astle discloses a video database indexing as shown in Figure 2, and teaches the conventional detection of scene cuts of video, and fade and cross fading occurring between video shots (see column 7, lines 30-65, column 8, line 55 to column 9, line 41, column 11, lines 3-23). It is noted that Burt et al teaches the particular mosaic based compression system which exploits the temporal and spatial redundancy within a sequence of images and wherein a series of mosaics from the subsequences of images are created (see column 14, lines 28-40). Since Burt et al is interested in exploiting temporal and spatial redundancy of images, it is therefore considered obvious that the created mosaic subsequences of images pertain to subsequences between scene cuts. Therefore, it would have been obvious to one of ordinary skill in the art, having the Burt et al and Astle references in front of him/her and the general knowledge of the manipulating of images between scene cuts, would have had no difficulty in providing the scene cut detection with fade and cross fading features as taught by Astle for the video display system of Burt et al so that the video processor of Burt detects scene cuts in the

video, the input subsequences being selected so as to not include a scene cut between the frames of a given input subsequence, the video processor of Burt et al produces input subsequences by dividing the scenes between the scene cuts/pairs of adjacent scene cuts into the input subsequences, wherein the super frame processor of Burt et al generates an output sequence from the output subsequences with cross fading from the end of each preceding output subsequence to the beginning of the next succeeding output subsequence, wherein the output subsequences are displayed in sequence by fading from the end of each preceding output subsequence into the beginning of the next succeeding output subsequence, for the same well known manipulating of similar features within a video sequence of images between scene cuts, fading, and cross fading purposes as claimed.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Taubman discloses a method for providing motion compensated multi-field enhancement of still images from video.

Gilbert et al discloses a system for digitally capturing and recording panoramic movies.

Boyer et al discloses a method and apparatus for generating unlimited selected image views from a larger image.

Coombs et al discloses an identifying of film frames in a video sequence.

Astle discloses a bit allocation in a coded video sequence.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.

Richard Lee/rl

9/3/04